

SPERM/CO ID# 60 Date 5/12/82 Doc ID# DIN

STATE LABORATORY OF PUBLIC HEALTH
DIVISION OF HEALTH SERVICES
N.C. DEPARTMENT OF HUMAN RESOURCES
P.O. BOX 28047 - 306 N. WILMINGTON ST., RALEIGH 27611



INORGANIC CHEMICAL ANALYSES - PUBLIC WATER SYSTEM

Complete All Items Above Heavy Line
(See Instructions on Reverse Side)

Name of System: Jackson Co. L.F. @ Cullowhee
Address: Cullowhee
NC. ZIP
County: Jackson
Report To: Sony Babb
Address: DAS PO Box 2091
Raleigh NC ZIP 27602-2091
Telephone Number: (919) 733-2178
Collected By: Jim Moore
Date Collected: 5/12/82 Time: 1:00 PM
Location of Sampling Point: Stream below L.F.
(Address where sample was collected)
Remarks: Star (L.F. Pipe)

Type of System:
☒ Community
☐ Non-Community
Source of Water:
☒ Ground ☐ Both
☒ Surface ☐ Purchased
Source of Sample:
☐ Distribution Tap ☐ House Tap
☐ Well Tap
Type of Sample:
☒ Raw ☐ Treated
Type of Treatment:
☒ None ☐ Lime
☐ Chlorinated ☐ Soda Ash
☐ Fluoridated ☐ Polyphosphate
☐ Filtered ☐ Water Softener
☐ Alum ☐ Other
Type of Sample:
☐ Regular ☐ Private
☐ Check ☒ Special

WATER SYSTEM I.D. NUMBER (COPY FROM MAILING LABEL)

□□-□□-□□□

State Drinking Water Parameters (Required)

	Results	
Arsenic	<u><0.10</u> mg/l	2
Barium	<u><0.1</u> mg/l	2
Cadmium	<u><0.005</u> mg/l	3
Chromium	<u><0.01</u> mg/l	2
Fluoride	<u><0.10</u> mg/l	2
Lead	<u><0.03</u> mg/l	2
Mercury	<u><0.0002</u> mg/l	4
Nitrate (as N)	<u>0.65</u> mg/l	2
Selenium	<u><0.005</u> mg/l	3
Silver	<u><0.02</u> mg/l	2
pH	<u>7.4</u> units	1
Iron	<u>0.71</u> mg/l	2
Manganese	<u>1.37</u> mg/l	2

Optional Parameters (List as needed)

	Results
Conductivity	<u>442 umho/cm</u>
Chloride	<u>61</u>
Copper	<u><0.05</u>
Cobalt	<u>7</u>
TDS	<u>246</u>
Sulfate	<u>5.50</u>
Zinc	<u><0.05</u>
TSC	<u>10</u>

Date Received MAY 17 1982 Date Reported 5/25/82 Reported By 9912

Date Analyzed Laboratory Number

INSTRUCTIONS

Using typewriter or ball point pen, fill in all requested information on the top portion of form front. Please print legibly if typewriter is not available.

Before taking the sample, remove the two "freeze packs" from the styrofoam mailer and place in a freezer overnight. (SAMPLES NOT PRESERVED BY ICING DURING SHIPMENT WILL NOT BE TESTED.)

SAMPLE COLLECTION:

- 1) Remove the two 1-quart plastic containers and inflate by mouth, if uninflated.
- 2) Let the water (to be sampled) run for 5 minutes to assure that the water is from the distribution system.
- 3) Rinse each plastic container two or three times, and discard the water.
- 4) After rinsing, fill each container to within approximately one inch of top of the sampling container. Then cap the container securely. Check samples (see Types of Samples below), samples from non-community systems, and special samples may contain only one 1-quart sampling container, rather than two.

SAMPLE SHIPMENT:

- 1) After collection of the sample(s), replace the two frozen "freeze packs" in the styrofoam mailer.
- 2) Next, place the two 1-quart samples into the mailer and cap.
- 3) After capping the styrofoam mailer, place the report form (UNFOLDED) on top, then seal the cardboard box. Mail immediately to the State Laboratory using the supplied label. The sender is required to pay shipping costs.

The analysis takes several days for completion, and the report will be mailed back as soon as possible. Please do not call the laboratory to request "early" results, unless absolutely necessary.

LIMITS OF ALLOWABLE CONCENTRATIONS FOR DRINKING WATER ARE LISTED BELOW:

<u>Parameters</u>	<u>Limits (mg/l)</u>	<u>Methods (EPA-600/4-79-020)</u>
Arsenic	0.05	AA, furnace technique, pp. 206.2-1 - 206.2-2
Barium	1.0	AA, direct aspiration, pp. 208.1-1 - 208.1-2
Cadium	0.010	AA, furnace technique, pp. 213.2-1 - 213.2-2
Chromium	0.05	AA, furnace technique, pp. 218.2-1 - 218.2-2
Fluoride (Temperature Dependent)	1.4-2.4	Ion Selective Electrode, pp. 340.2-1 - 340.2-3
Lead	0.05	AA, furnace technique, pp. 239.2-1 - 239.2-2
Mercury	0.002	Manual Cold Vapor technique, pp. 245.1-1 - 245.1-6
Nitrate (as N)	10.0	Colorimetric, Brucine, pp. 352.1-1 - 352.1-3
Selenium	0.01	AA, furnace technique, pp. 270.2-1 - 270.2-3
Silver	0.05	AA, direct aspiration, pp. 272.1-1 - 272.1-2
Iron	0.3	AA, direct aspiration, pp. 236.1-1 - 236.1-2
Manganese	0.05	AA, direct aspiration, pp. 243.1-1 - 243.1-2
pH	not less than 6.5 units	pH Electrometric, pp. 150.1-1 - 150.1-3

If sample concentrations are greater than the allowable concentrations, a check sample(s) will be required.

TYPES OF SAMPLES

- Regular: A sample(s) submitted to meet the monitoring requirements of the North Carolina Drinking Water Act, GS 130 - Article 13D.
- Check: A sample(s) submitted when a previous sample has exceeded the allowable concentration. The check sample should be taken from the same sample distribution tap as the previous sample.
- Private: A sample(s) from a private water supply submitted by a licensed physician, sanitarian or other health department representative.
- Special: A sample(s) submitted by an engineer working with the State or the E.P.A., a sample taken by the owner/operator of a water system for a new well, a landfill test well sample or other non-categorized sample.